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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,677	04/16/2001	Ludwig Hofmann	112740-206	2308
29177	7590	11/22/2005	EXAMINER	
BELL, BOYD & LLOYD, LLC P. O. BOX 1135 CHICAGO, IL 60690-1135			ELAHEE, MD S	
			ART UNIT	PAPER NUMBER
			2645	

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/807,677

Applicant(s)

HOFMANN, LUDWIG

Examiner

Md S. Elahee

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-28, 33-53 and 58-65 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-28, 33-53 and 58-65 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This action is responsive to an amendment filed 08/22/05. Claims 16-28, 33-53 and 58-65 are pending. Claims 1-15, 29-32 and 54-57 have been previously cancelled.

### ***Response to Arguments***

2. Applicant's arguments filed 08/22/05 have been fully considered but are moot in view of the new ground(s) of rejection which is deemed appropriate to address all of the needs at this time.

### ***Claim Objections***

3. Claims 16 and 42 are objected to because of the following informalities: regarding claim 16, the phrase 'at a least' in page 2, line 3 of the claim appears to be 'at least a' and the citation 'deactivates' in page 2, line 14 appears to be 'deactivate'. Appropriate correction is required.

Regarding claim 42 is rejected for the same reasons as discussed above with respect to claim 16.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 16-28, 33-53 and 58-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pequet et al. (European Pub. No. 0, 689,303 A1) in view of Luzzatto (U.S. Patent No. 5,689,802).

Regarding claims 16 and 42, Pequet teaches at least one base station (abstract; fig.1; page 1, lines 29-35).

Pequet further teaches a plurality of mobile stations including at a least first and a second mobile station, each of the plurality of mobile stations able to carry out transmission and reception operations in both a duplex mode and a semiduplex mode, the duplex mode being a frequency division duplex mode and the semiduplex mode being a time division duplex mode (abstract; fig.1, fig.2; page 2, lines 14-22, page 3, lines 14-22, page 4, lines 26-41, page 5, lines 66, 67, page 6, lines 1-15, 48, 58, page 7, line1).

Pequet further teaches that the first mobile station simultaneously carries out transmission and reception operations with the at least one base station in the duplex mode and carries out transmission and reception operations with the second mobile station in the semiduplex mode (fig.1, fig.2; page 2, lines 14-22, page 3, lines 14-22, page 4, page 4, lines 26-41, page 5, lines 66, 67, page 6, lines 1-15, 48, 58, page 7, line1).

Pequet teaches the transmission of signals from the second mobile station via the first mobile station to the base stations and the transmission of signals from the base station via the first mobile station to the second mobile station (fig.1; page 3, lines 14-22).

However, Pequet does not specifically teach that the first mobile station may switch on and off, at least one of manually and automatically to activate or deactivate the repeater operation of the first mobile station. Luzzatto teaches that the radio 11 [i.e., first mobile station] may switch on and off, at least one of manually and automatically to activate or deactivate the repeater operation of the radio 11 (fig.1, 2; col.3, lines 35-67). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Pequet to allow the first mobile station to switch on and off, at least one of manually and automatically to activate or deactivate the repeater operation of the first mobile station as taught by Luzzatto. The motivation for the modification is to have doing so in order to control the repeat operation of radio unit.

Regarding claims 17 and 43, Pequet teaches that the transmission and reception operations of the first mobile station are carried out cyclically in time slots, the time slots for the duplex and semiduplex modes running synchronously with respect to one another (fig.1, fig.2; page 2, lines 14-22, page 4, lines 26-41, page 5, lines 66, 67, page 6, lines 1-15, 48, 58).

Regarding claims 18, 19 and 44 are rejected for the same reasons as discussed above with respect to claim 1.

Regarding claims 20-23 and 46-48, Pequet teaches that the first mobile station further carries out transmission and reception operations with a third mobile station in the semiduplex mode (fig.1, fig.2; page 5, lines 66, 67, page 6, lines 1-15, 48, 58).

Regarding claims 24-27, Pequet teaches that the first mobile station further carries out transmission and reception operations with a third mobile station in the semiduplex mode, such that signals from the second mobile station are transmitted via the first mobile station to the third

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mobile station, and signals from the third mobile station are transmitted via the first mobile station to the second mobile station (fig.1, fig.2; page 5, lines 66, 67, page 6, lines 1-15, 48, 58).

Regarding claim 28, Pequet teaches that the plurality of mobile stations are coupled to one another to form at least one of a communication chain and a communication network (abstract; fig.1; page 2, lines 14-22, page 3, lines 14-22).

Regarding claims 50-52, Pequet teaches that a part for additionally carrying out transmission and reception operations with a third mobile station in the semiduplex mode, such that signals from the second mobile station are transmitted via the first mobile station to the third mobile station, and signals from the third mobile station are transmitted via the first mobile station to the second mobile station (fig.1, fig.2; page 5, lines 66, 67, page 6, lines 1-15, 48, 58, page 7, line1).

Regarding claims 33-41, 45 and 58-65 are rejected for the same reasons as discussed above with respect to claims 18 and 20.

Regarding claims 49 and 53 are rejected for the same reasons as discussed above with respect to claims 20 and 50 simultaneously.

### *Conclusion*

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

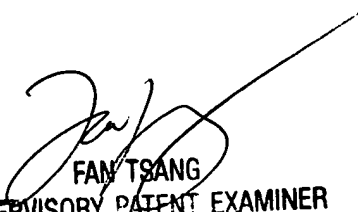
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Md S Elahee whose telephone number is (571) 272-7536. The examiner can normally be reached on Mon to Fri from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. The fax phone number for the organization where this application or proceeding is assigned is (571) 272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M.E.

MD SHAFIUL ALAM ELAHEE  
November 13, 2005

  
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